CLAIMS:

1.   A method of reading a magneto-optical recording medium (10) comprising a storage layer and a readout layer, wherein an expanded domain leading to a readout pulse is generated in said readout layer by copying of a mark region from said storage layer to said readout layer upon heating by a radiation power and with the help of said external magnetic field, said method comprising the steps of:

a) controlling the size of a spatial copy window of said copying process by varying a predetermined reading parameter in response to a control information derived from said readout pulse,

b) applying a predetermined additional pattern of change to said predetermined parameter, and

c) adjusting a decision level pattern used for deciding on a readout value in dependence on a characteristic parameter of said additional change pattern.

2.   A method according to claim 1, wherein said control information is derived from a deviation of the phase of a clock signal recovered from said readout pulse with respect to the average phase value of a clock signal derived from said readout pulse.

3.   A method according to claim 1 or 2, wherein said control information is derived from a deviation of the phase of a clock signal recovered from said readout pulse with respect to the phase of a wobbled groove or of a series of embossed marks provided on the recording medium.

4.   A method according to claim 1, wherein said readout value is a code run length.

5.   A method according to claim 4, wherein said code run length is a space run length or a pulse position.

6.   A method according to claim 1, wherein said predetermined parameter corresponds to the value of said radiation power and/or said external magnetic field.

7.   A method according to claim 1, wherein said additional change pattern is a periodic modulation pattern having a predetermined frequency, and wherein said characteristic parameter corresponds to the sign and/or amplitude of said periodic modulation pattern.

8.   A method according to claim 1, wherein said decision level pattern comprises at least one decision level.

9.   A method according to claim 8, wherein the decision level of said decision level pattern is adjusted to a respective intermediate level.

10.   A method according to claim 9, wherein said respective intermediate level is selected from at least one discrete intermediate level.

11.   A method according to claim 10, wherein said at least one discrete intermediate level comprises a first intermediate level corresponding to a first range of said characteristic parameter and a second intermediate level corresponding to a second range of said characteristic parameter.

12.   A method according to claim 9, wherein said predetermined additional pattern is selected such that DC-free readout data is obtained, and wherein said adjusting step is performed through monitoring of running sums calculated for each set of intermediate levels.

13.   A method according to claim 12, wherein said decision level pattern is adjusted by respective loop filter means to which said separate running sums are supplied.

14.   A method according to claim 9, wherein said respective intermediate level is obtained by a continuous level adjustment.

15.   A method according to claim 1, wherein said control information is obtained from a deviation of a maximum value of a phase error of said recovered clock signal from a predetermined set value.

5   16.   A reading apparatus for reading from a magneto-optical recording medium (10) comprising a storage layer and a readout layer, wherein an expanded domain leading to a readout pulse is generated in said readout layer by copying of a mark region from said storage layer to said readout layer upon heating by a radiation power and with the help of an external magnetic field, said apparatus comprising:

10   a) control means (30, 32) for controlling the size of a spatial copy window (w) of said copying process through variation of a predetermined reading parameter in response to a control information derived from said readout pulse,
     b) change means (32) for applying a predetermined additional pattern of change to said predetermined parameter, and
15   c) adjusting means (271-273, 275, RDS1, RDS2) for adjusting a decision level pattern used for deciding on a readout value in dependence on a characteristic parameter of said additional change pattern.

     17.   A reading apparatus according to claim 16, wherein said adjusting means
20   comprise comparator means (271) for setting said decision level pattern and summing means (RDS1, RDS2) for calculating at least one running sum used for adjusting said decision level pattern.

     18.   A reading apparatus according to claim 17, wherein said adjusting means
25   comprise loop filter means (272, 273) for filtering said at least one running sum.

     19.   A reading apparatus according to claim 17 or 18, wherein said adjusting means comprise adding means (275) for adding said at least one running sum to an input signal of said comparator means (271).

30
     20.   A reading apparatus according to claim 16, wherein said input signal is obtained from a phase-locked loop circuit (26) of a clock recovery means used for generating said control information.

21.   A reading apparatus according to claim 16, wherein said change means (32) are arranged to use a periodic pattern of a predetermined frequency as said predetermined additional change pattern.